REMARKS OF JAY SCHWARZ, WIRELINE ADVISOR TO FCC CHAIRMAN AJIT PAI, AT THE 2018 CEO CLOSE-UP CONFERENCE OF THE NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

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Thank you all for that warm welcome. Thank you, Congressman Matheson for that introduction, and, more important, for your leadership and partnership. One of Chairman Pai's first acts after taking office was to establish a panel of outside experts to identify barriers to broadband buildout—what we call the Broadband Deployment Advisory Committee. Of course, for this panel to have the biggest impact, you wanted to have the best people. And Jim Matheson has been a great asset to the Committee. We were honored to have him serve on this panel, and its work has been better for it.

Today I want to discuss Chairman Pai's belief that we are on the cusp of a new era of partnership between the FCC and rural electric cooperatives.

This was not an obvious pairing. Historically, our nation's electric coops have had little to do with the FCC. But as times and technology have changed, so too has the relationship between the FCC and electric coops.

That's what I want to talk about today: our hope that electric coops will become a bigger part of closing the digital divide and delivering online opportunity to rural Americans who have been bypassed by the broadband revolution. And how the FCC can work with you all to bring about this change.

In more colloquial terms: Imagine this is the TV show "The Bachelor," and I'm here to talk about taking our relationship to the next level.

As we—hopefully—make this new connection with one another, one of the most important things for you to understand up front is that, as long as Chairman Pai is in charge, rural America will be a first thought, not an afterthought, at the FCC.

Chairman Pai is a proud son of Parsons, Kansas—population 10,000, give or take—and his parents still live there. He doesn't just know the value of growing up in a rural community. He cherishes it. And he wants to ensure future generations will be able to have that same experience.

But there's mounting uncertainty about the future of rural America. Growing numbers of rural Americans have been leaving home, and this trend appears to be accelerating. In the chairman's home state over the next 50 years, 62 out of 105 Kansas counties are projected to lose more than a quarter of their population. The brain drain flowing out of rural communities is real, growing, and troubling.

When it comes to broadband, too, the hard truth is that rural America has a lot of catching up to do. In rural America, 28% of households lack access to high-speed, fixed service, compared to just 2% in urban centers.

That's a big reason why, on his first day as Chairman, he delivered a speech to the Commission's staff declaring that his number one priority would be closing the digital divide so that every American can enjoy the benefits of high-speed Internet.

Over the years, many people have likened closing the rural digital divide to the rural electrification effort—and for good reason.

Both electricity and high-speed connectivity are what economists like myself would call "general purpose technologies." The defining characteristic of these technologies is that they enable new advances and innovations. Electrification kicked the Industrial Revolution into overdrive and fundamentally

transformed the way we lead our lives. It made lighting and home appliances equally accessible in rural and urban areas. What's more, it meant that access to electricity was not a barrier to factories locating in small towns.

Wired and wireless high-speed connectivity offer similar potential to dramatically improve our quality of life. A key similarity between electricity in the early 20th century and broadband connectivity in the early 21st is that if you aren't plugged in, it's nearly impossible to be a full participant in our economy or democracy. And broadband's power to conquer distance and overcome isolation holds special promise for rural America. It empowers small businesses to reach new customers and markets. If your local high school doesn't offer AP Physics, distance learning makes it possible to take the class online. And telemedicine makes it possible to be treated remotely by a specialist even if you live hours from the nearest hospital.

Whereas many have drawn parallels to closing the digital divide and rural electrification, we have been slow to realize that perhaps one of the best solutions to these challenges are one in the same.

That's where you guys come in.

Most of you are *not* in the broadband business. But the early success of those who are has been pretty remarkable. Anyone who doubts the efficacy of electric coops offering Internet access should take a look at Missouri, a state in which Chairman Pai recently visited with electric cooperatives. This story is going to take a minute, but stay with me.

A few years ago, Google famously decided that it was going to start offering home broadband service in select markets. It launched Google Fiber and basically called on cities to make the best offer for Google to come to their town. The first big winner was Kansas City, and Google Fiber opened shop in 2012, offering gigabit service. Fast forward to 2014, and Ookla, a leading Internet metric company, ranked the areas in Missouri with the fastest broadband service. In a surprise, Kansas City, powered by Google Fiber, was not at the top. Who was number 1? That would be Tipton, Missouri, population 3,200. How did this happen? Well, Tipton had an electric co-op.

Co-Mo Electric—an NRECA member—serves 31,000 electric meters in central Missouri and realized several years back that its members weren't satisfied with their broadband options. And so Co-Mo Electric constructed the first fiber-to-the-home network built on electric cooperative infrastructure and made it available to all of its membership. It did this without any federal support, without any state support, without any grants, and without any federal loans. Randy Klindt, who led the Co-Mo Connect project, said that its members who switched from other providers not only got faster service, but they also saved \$20 to \$25 per month. According to Mr. Klindt's estimates, that translates into over \$1 million a year in disposable income in the pockets of its members that can go back into the local economy in other ways.

Co-Mo Electric was the first success story, but not the last. Last year, Chris Allendorf of Jo-Carroll Energy in Illinois testified before Congress about his co-op's successful fiber pilot project in Galena, Illinois, which has enjoyed a take rate of over 60% from area businesses. Across the country, about 60 electric cooperatives have started broadband projects, and pretty much across the board these business plans are working.

Overall, the number of Americans receiving affordable, high-speed broadband Internet access from electric coops is still small, but together these examples add up to a big deal because they shatter some myths that have held back our efforts to connect rural America.

First, for as long as the commercial Internet has been around, the conventional wisdom has been that some parts of rural America are too expensive to connect. People have said there just aren't enough customers or the terrain is too difficult to justify the costs. But in community after community, we see electric coops rolling out networks to unserved households in remote areas without significant subsidies.

Second, these success stories blow up the idea that rural broadband service must inevitably be second-rate broadband service. In some of the most difficult conditions possible, Co-Mo was able to offer service equal to what Google offered under idealized conditions. Our goal for closing the digital divide shouldn't be providing just any service to unserved areas. Our goal should be making sure that when these rural communities get online, they have the bandwidth they need to access the same services and applications as people like me who live in a major metropolitan area.

Why are electric coops so well-suited to the task of delivering broadband to rural America?

For starters, you already own much of the infrastructure. You already own the poles. You already have access to the rights of way. In many instances, you already have a fiber plant to help manage your electric grid. This dramatically lowers deployment costs.

But perhaps your biggest asset is your membership and the trust you have built within the communities you serve. For decades, you have done the hard work because it's good for your communities—not necessarily because it's good for you. And you have worked collaboratively with local leaders when decisions are being made about local economic development. Increasingly, those decisions will be about how to access the opportunities being created by the digital revolution. And we all know that's going to require high-speed broadband.

You also already provide essential electrical service to more than 40 million Americans. Closing the digital divide will require connecting many offline Americans who live and work within your service footprint. Common sense and economics tells us that we should try to leverage this relationship and your expertise.

So how can the FCC and rural electric cooperatives partner together?

The main opportunity I wanted to highlight today is the Commission's upcoming Connect America Fund Phase II auction. Or—since we are learning each other's acronyms—CAF 2.

Our Connect America Fund auction will use competitive bidding to efficiently allocate up to \$2 billion over the next ten years to support deployment of networks providing both voice and broadband service, thereby expanding broadband availability to many more unserved Americans.

I'm excited to let you know that today, Chairman Pai shared with his colleagues proposed bidding rules and procedures for this CAF 2 auction. He also has proposed an order resolving all remaining petitions for reconsideration regarding CAF 2 that will clear the way for the auction. At our next meeting on January 30, the Commission is expected to vote on these proposals—the last significant step before we can begin the application process and get this auction underway.

So get ready: We are planning on beginning the CAF 2 auction this July.

Now, I understand that you need to run the numbers and consult your members, but from the FCC's perspective, we want you to be a part of this auction. We strongly encourage you to explore this opportunity and put it before your members to decide if it makes sense for the economic future of your communities to put in a bid. You can also consider collaborating with a local telecom company in making a bid. And think about edging out—there may be areas near your current service area that need broadband. Our hope is that some enterprising electric coops may be able to use CAF 2 as a way to serve those areas too.

One more thing you should know about the Connect America Fund is that it is open to supporting any technology that can meet our requirements for Internet service, whether that's fiber, a fixed wireless solution, or something else. We want to give Internet providers flexibility to offer solutions that work best for their communities.

The bottom line is that this first-of-its-kind opportunity for electric cooperatives fortuitously coincides with the first meaningful push among your membership to get into the broadband business. Don't let this opportunity pass you by without giving it a hard look.

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I'll close with this. On the NRECA website, Congressman Matheson says, "Our story is America's story." Well, Chairman Pai agrees with that, and also believes it's an American story because it's a story about community. A story of neighbors coming together to lift each other up—to make the whole stronger than the sum of its parts.

The story of our electric cooperatives is also an American story because it's about opportunity for all. We lit up the American countryside because we believe everybody who works hard and plays by the rules should have a fair shot at the American dream.

And the story of our electric cooperatives is an American story because it's one of audacity. As President Kennedy once said of the literal moon shot, Americans do things "not because they are easy, but because they are hard." The idea of enlisting 900 separate local cooperatives to bring electricity to tens of millions of Americans in the most remote corners of the country is no less bold than putting a man on the moon. And you did it.

To close the digital divide, we are going to need that same commitment to the timeless American values of community, opportunity for all, and audacity. To close the digital divide, we are going to need America's electric cooperatives. So let's get to work—together.

Thank you.